84-7

DONLEY *book of* FIREPLACES

DONLEY *book of* FIREPLACES

3rd Edition

The Donley Brothers Co.
13900 Miles Avenue, Cleveland, Ohio

W. H. Nilges, Cleveland, Owner. Reynold Hinsdale, Architect
Caenstone—Tudor Design
Modeled and Cast by Fischer & Jirouch Co.

Genuine Home Fires

TURN back the pages of the history of America. Stop where you will and read, and you will find that the fireside has always been bonded with family life. Picture the American Indians gathered around their open fires to eat, sleep and hold councils of war. Turn forward another century in American history and there, too, you will find our Colonial ancestors gathered around their big open fires where originated the true American home life.

And today the home fire still burns its way into the hearts of the American people. All the inventions and contrivances of man to do away with the open fire have been in vain. Present day home owners still look forward to the fascination of pleasant evenings before the open fire.

To trace the story of the home fire it is necessary to turn back far beyond American history to the instincts and traditions of thousands of generations of our ancestors. Many authorities believe that the first idea of building a roof and four walls came through the need of protecting the fire around which so many tribal events took place. Sociologists tell us that the fire of tribal savages was their most sacred possession, worshiped as a deity, and that family life only became possible when the individual was permitted to withdraw his own share of fire from the tribal fireplace.

Thus, in ancient times the fire on the hearth was a veritable household god. It played a leading part in the religious as well as practical side of life. The fire was well tended, for to let it go out meant a spiritual as well as practical calamity. Religious calamity because the fire could not be lighted without the performance of a long religious ceremony; practical because the fire must needs be kindled by the vigorous rubbing of two sticks until friction produced the necessary spark.

The middle of the eighteenth century saw the dawn of the age of invention. Then man began to turn his thoughts toward improving and bettering his living conditions.

Munroe Walker Copper, Jr., Cleveland, Owner and Designer
The Wiebenson Company, Builders

Then it was that the first known practical study was made of the fireplace. Curiously enough the renowned sage, Benjamin Franklin, was one of the first to write on the practical side of fireplaces. He discussed them chiefly for the purposes of showing defects and promoting the idea of the Franklin stove.

It seems as though fireplaces have always smoked, for such was the case in Franklin's time. It is interesting to learn that in his comments he mentions the fact that most fireplaces smoke.

"Most of the old-fashioned Chimneys in Towns and Cities," wrote Franklin in 1844, "have been of late years reduced . . . . by building Jambs within them and narrowing the hearth and making a low Arch or Breast. These new Chimneys," he remarks, "tho they keep the room generally free from smoke and . . . . will allow a door to be shut, yet the Funnel still requiring a considerable Quantity of Air, it rushes in at every crevice so strongly as to make a continual whistling or howling and is very uncomfortable, as well as dangerous to sit against any such crevice."

The man of Franklin's time who did the most for fireplace practice is known to fame as Count Rumford. Many an American who has encountered bare mention of his name in connection with fireplaces has wondered what the man's nationality might be. The name sounds English but the title of count is unknown in the catalogue of English nobility.

The fact is that Count Rumford was a Massachusetts Yankee, named Benjamin Thompson. While one of the ablest men of his day, a scientist, statesman and scholar, he forfeited much possible American fame, when he sided with Tories in the Revolutionary War, and later passed his life in England and Bavaria.

Count Rumford's work on fireplaces represents an enthusiasm that lasted throughout his life. Some

Dr. B. S. Rothwell, Cleveland, Owner
Munroe Walker Copper, Jr., Architect

of the designs presented in this book vary only in a minor degree from the principles and dimensions which he advocates. His ideas are set forth in his own words in an essay of 1798, which has been published in various forms. While the work of an exact mind, the writing is somewhat involved and makes difficult reading.

James Brown, Cleveland, Owner. H. L. Schupe, Architect
Brockman Narovec Co., Builders

He performed a valuable service, however, in pointing out the practical defects of the huge, deep fireplaces with their scanty warmth, wasteful use of fuel, their violent draft and their tendency to smoke. He reduced the fireplace to a practicable size and tremendously improved the radiation of heat by shallow wall depth and by splaying the side wall in such a way as to give the fireplace the general shape and function of a reflector.

THE FIREPLACE OF TODAY

The centuries of use of the fireplace and the gradual improvement of its building through the passing of time has made the present day, correctly built fireplace a thing of beauty and distinctive charm as well as a reliable heating unit.

Years of studying of designs has given us an unlimited variety of external beauty in designs. Wood and stone beautifully carved and stained as well as bricks artistically laid have made American fireplaces among the most beautiful in the world.

Frank Simmelink, Owner and Designer
Chas. Suesse, Builder

Engineering skill has labored for years in perfecting a fireplace that would not send out clouds of smoke into the room to mar the fireside comfort. Gone, too, is the necessity of having a beautiful gleaming white fireplace marred by soot and smoke smudges. The drafty, inefficient fire has given away to a perfect heating unit giving out abundance of heat to all corners of the room and consuming only a minimum of fuel.

THE BEAUTY OF THE FIREPLACE

As already mentioned elsewhere, fireplace operation has, until recent years, always been somewhat of a gamble. Many a home owner has spent time and effort in planning and building a beautiful fireplace only to be disappointed when the first fire was started. Perhaps the fireplace belched out clouds of smoke making it impossible to keep a fire burning. Often the beautiful fireplace front was ruined by soot smudges. Worst of all the fire may have refused to burn. In times past, too, the housewife did not take kindly to the dirty work necessary in removing the ashes by means of a small shovel. These fireplace draw-backs are now a thing of the past.

Home, Sweet Home, Cleveland.
Barriball Brothers

The fireplace draft can now be regulated with certainty of results by following simple directions. It is no longer necessary to carry out ashes after each fire. Truly the centuries' old fireplace has been brought down to modern twentieth century efficiency.

In passing it might be well to add that the fireplace is growing constantly and rapidly in favor with the American home owner. There is something about the coziness and warmth of the open fireside that appeals to the heart of nearly everyone. Toasting one's self in front of an open log fire in the long winter evening is a luxury that almost any family can enjoy.

H. T. Jeffries, Cleveland, Owner and Architect

Every home, regardless of the kind of construction, should have at least one fireplace. There's a sentimental, decorative and practical advantage in the good looking, efficient fireplace. Sentimental, because many of

the happiest hours of the home are spent in human fellowship before the blazing log. Decorative, because in these days of beautiful homes, no living room seems complete else it has the cheery open fire around which family and friends may gather. And practical, for in early spring and late autumn it provides the necessary heat for cool evenings. In winter it becomes a welcome supplement to the home heating.

W. H. Pratt, Cleveland, Owner. H. L. Schupe, Architect
Geo. W. Thomas, Builder

This book mainly is written to attain for the husband and wife who are planning the new home, a beautiful, efficient, cozy and charming home fire. It is to show the home owner, architect and builder that a genuine home fire, such as one reads about, is not merely a dream but can be a reality.

To those who are deep in the fascinating task of planning the new home and who desire the charming fireplace with its undying sentiments and traditions of history we submit these designs and plans. It is our sincerest hope that you will not let formal correctness of design or lack of information stand between you and a frequent and cherry blaze on your hearth. It is our wish that your fireplace will ever invite you to kindle the glowing coal and the crackling log and that you may always have the fellowship of the fireside in your home.

H. L. Warner, Cleveland, Owner. H. B. Burdic, Architect
The H. W. Brown & Son Co., Builders

J. B. Clark, Cleveland, Owner,
Designer and Builder

Dr. B. S. Rothwell, Cleveland, Owner
Munroe Walker Copper, Jr., Architect

Tom Knight, Brecksville, Ohio, Owner,
Designer and Builder

H. P. Bennett, Cleveland, Owner
H. L. Beavis, Designer and Builder

A GROUP OF ROCK FIREPLACES

EXTERNAL FIREPLACE DESIGNS

J. T. Au Werter, Cleveland, Owner
H. Casey, Architect and Builder

Perhaps the home owner's first consideration in planning a fireplace is the design or external appearance, size and harmony with the general decorative plan. In order to help you to select a type of fireplace that will fit in with your decorative scheme we are showing in this booklet a wide variety of fireplace designs. They range all the way from the expensive caenstone imported from England to the simple brick fireplace. There's a style for the living room and the library. All in all they represent a wide range in fireplace designs and costs.

If when determining the fireplace design the owner can secure the help of an architect or a mantel concern it is wisest to do so. If, however, the decision rests upon himself the following suggestions are helpful.

Avoid the impulse to make an over-ornate fireplace. It is not necessary and frequently does not "compose" itself into the general interior picture. If any general architectural motive runs through the woodwork and decorations, do not select a contrasting architectural motive for the mantel.

The all brick fireplace may be considered first. Every variety of standard face brick lends itself to fireplace construction, giving an effect of richness and sturdiness. Slight variations in the bond and spacing of the brick offer a pleasing variety of decorative effects.

A. W. Morrison, Cleveland, Owner
Henry W. Grieme, Architect
Barriball Brothers, Builders

If a brick fireplace has been decided upon the owner will find it very easy to select a style. Perhaps brick is the most popular of all materials for fireplaces. There are a number of brick manufacturers who will submit books showing a great many brick designs in a wide variety of colors, textures and arrangements.

H. Casey, Cleveland, Owner, Architect and Builder

When not made of brick, the fireplace front may be of tiles, stone, stucco or wood. Beautiful mantel fronts, not unduly expensive, are made by wood-working companies and are finished like the other woodwork. A combination of a rich face brick immediately around the fireplace opening, with upper and side panels of wood, is justly popular. The cabinet work may vary from the simple medieval treatments, of which mission is a familiar example, to the heavily ornate Jacobean, the beautiful, delicately figured Adam fireplaces, the delicately classical Georgian designs with their fluted columns, or the plainer Colonial outlines, some of which can be executed with plain surfaces and simple mouldings.

The selection of the fireplace front is important in that it must co-ordinate and harmonize with the interior color scheme and decorative motives.

Having selected the fireplace front the next point up for consideration is the interior design and construction. To assure proper and easy operation the most careful thought should be given to that part of the fireplace that is hidden from view, and the fireplace opening itself.

Michigan Mutual Life Insurance Company, Detroit, Owner
Smith, Hinchman, Grylls Company, Architects

W. H. Nilges, Cleveland, Owner. Reynold Hinsdale, Architect

INTERNAL FIREPLACE DESIGN

Nearly every new home builder gives the most careful attention to the exterior design of the fireplace in order to make it harmonize with interior decorations. However, in the majority of cases the internal design of the fireplace is given little or no attention. That's why there are so many "cold fireplaces."

We believe that internal design is just as important, if not more so, than exterior design. We want you to avoid the calamity of the "cold fireplace" that is, the fireplace that looks beautiful but that cannot be used because it belches out smoke, or will not draw properly. Too often we have heard of and seen fireplaces that are fiascos simply because they were built wrong.

It was Benjamin Franklin, himself an authority on fireplaces, who said "handsome is as handsome does," and who knows, perhaps he had fireplaces in mind when he wrote this quotation. The fireplace interior must be correct or the exterior may be marred by soot and smoke.

In the following pages we are presenting plans for the interior of the fireplace, showing the right mechanisms to use to produce the best results. If, in building, you will see to it that these directions are followed carefully, you can be assured of success.

Samuel Keller, Owner. Harry L. Schupe, Architect
The Prospect Mantel & Tile Company, Builders

Donley Fireplace

In the following discussion of the interior design of the fireplace and the proper mechanism we want to keep in mind four definite objects:

1—Ready combustion of the fuel.
2—The discharge of all the smoke and gases up the chimney.
3—To radiate the greatest amount of heat in proportion to the fuel used.
4—The simplicity in construction of the fireplace.

It frequently happens that an immense fireplace in a quaint, Colonial home will tempt a home owner to build a fireplace entirely out of proportion to the size of the room. A fire that would fill such a fireplace would be too hot for the moderate size room. Then, too, the larger the chimney the greater the exhaustion of air from the room and the greater the forced-in draft from the doorways, windows, crevices, etc.

With this in mind the best general advice is to plan on a moderate size for your fireplace. A living room with 300 square feet of floor space, or less, is well served by a fireplace 30 to 36 inches wide. Fireplaces of 42, 48, 54 and 60-inch widths should only be constructed in rooms of correspondingly greater dimensions.

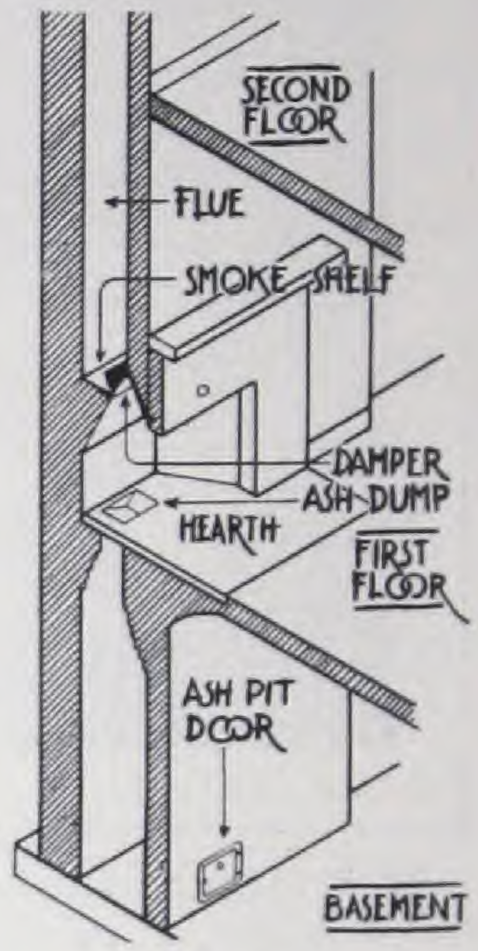


Fig. 1

TABLE OF DIMENSIONS

Width of Opening	Approximate Height	Use Damper Number Rotary Control	Use Damper Number Poker Control	*Flue Size Regular	*Flue Size Round
24	28	324	224	8 ½ x 8 ½	10" Dia.
28	28	330	230	8 ½ x 13	10" "
30	30	330	230	8 ½ x 13	12" "
34	30	336	236	8 ½ x 13	12" "
36	30	336	236	8 ½ x 18	12" "
40	30	342	242	8 ½ x 18	15" "
42	30	342	242	8 ½ x 18	15" "
48	33	348	248	13 x 13	15" "
54	36	354	254	13 x 18	18" "
60	39	360	260	18 x 18	18" "

*Note—The area of the Fireplace Opening should not exceed twelve and one-half times the net flue area.
If proper size flue lining is not available use next largest size.

THE FLUE

In addition to the above suggestions on size of opening, there is another factor that plays an important part in determining size. That is the size of flue opening.

If the chimney is built before the question of the fireplace is taken up, care should be used that the size of the fireplace opening is not more than twelve and one-half times the net area of the flue section. (See Table of Dimensions, Page 12.)

For example, a fireplace 30 inches wide and 30 inches high has an area in the opening of 900 square inches. The inside area of the smallest flue that can be used would be 72 square inches. The commercial lining nearest to this area is the 8 ½ x 13 inches, having an area of 80 square inches. These dimensions are based on fireplaces built according to our instructions and is not necessarily applicable to fireplaces built according to other plans.

Outside Dimensions	Inside Area
8 ½ x 8 ½ inches	52 sq. inches
8 ½ x 13 "	80 " "
8 ½ x 18 "	104 " "
13 x 13 "	126 " "
13 x 18 "	169 " "
18 x 18 "	240 " "

The cross-sectional area of the flue should be maintained throughout its height. If it is made smaller at any part, for

Construction Plans

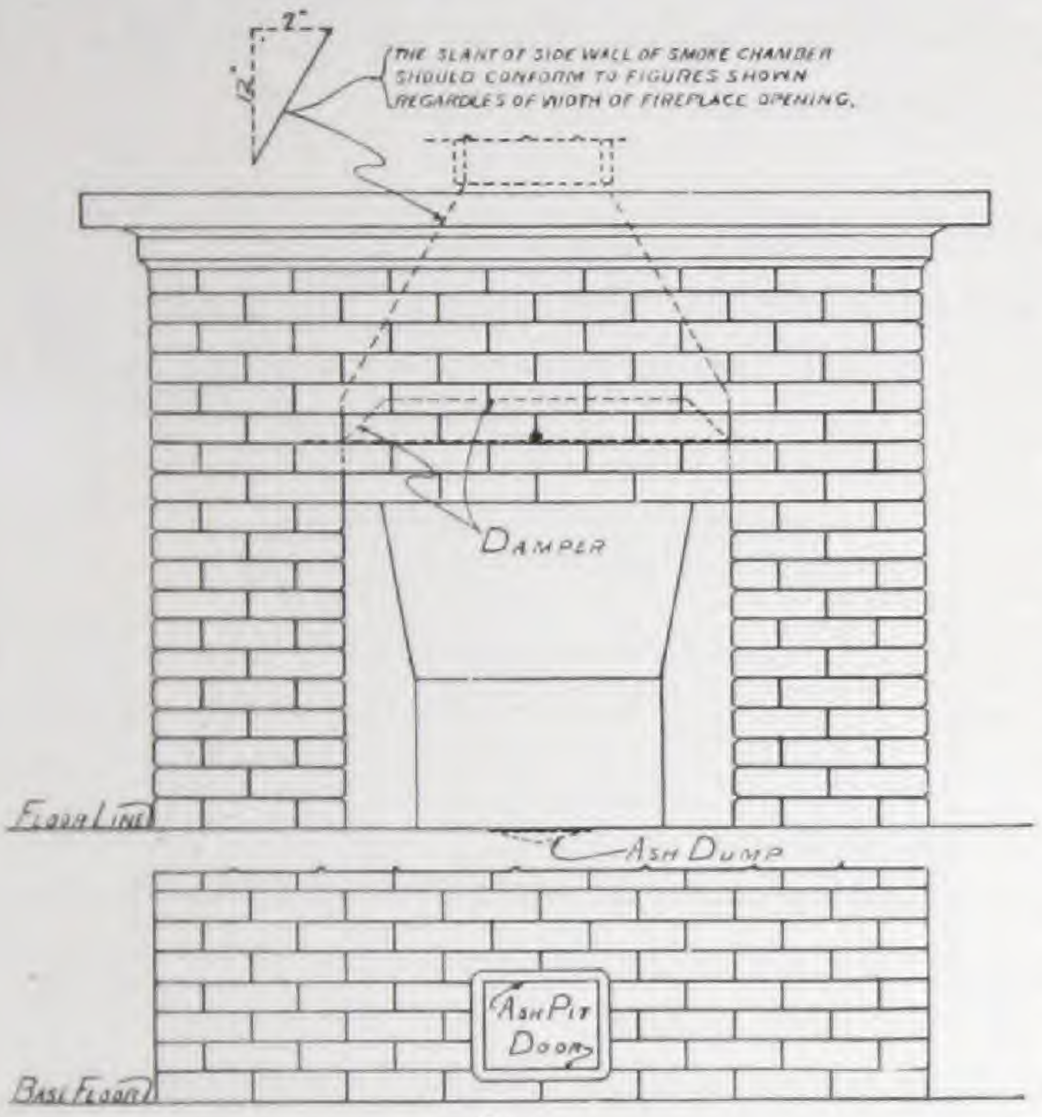


Fig. 2

any reason, the result is the same as if it were all built the size of the smallest part.

A factor of safety in flue size is advantageous, up to 20% excess over the above requirements. A greater factor presents no noticeable advantage.

The ideal flue has a circular section, owing to the tendency for the smoke to ascend in a spiral column. Next best is a square or nearly square section. A section markedly oblong should have a factor of safety in its sectional capacity. Square and oblong flue linings permit of easier and less expensive masonry work.

Flues sloping to one side in reaching main chimney should have a factor of safety corresponding to degree of slope. The recommended angle is 30 degrees from the perpendicular—more than 45 degrees is dangerous. In rough brick work make fireplace opening one foot wider and 12 to 18 inches higher than the finished fireplace opening. In Figure 3 the coarse hatching indicates rough brick work; close hatching indicates material placed at time damper is installed and the finished fireplace is built.

RELATION OF FIREPLACE PARTS

Notice particularly the table of dimensions, Page 12. Do not get the impression that the designs shown in this book work well under all conditions. The plans are of a single size and warning is issued against the conclusion that, in building a large fireplace, it is only necessary to take the plan of a small fireplace and enlarge the dimensions. This is a mistaken idea.

Use this table of limits as a guide in changes of scale. Notice particularly that the width is the principal variable. The height is pretty well fixed in practice as from 30 to 34 inches, probably in deference to the height of the flame and also with some view to proper mantel height. Fireplace depth is determined to a certain extent by wall depth or by the feasible projection into the room. Wall depth should be 18 to 20 inches for small fireplaces with little advantage in greater depth

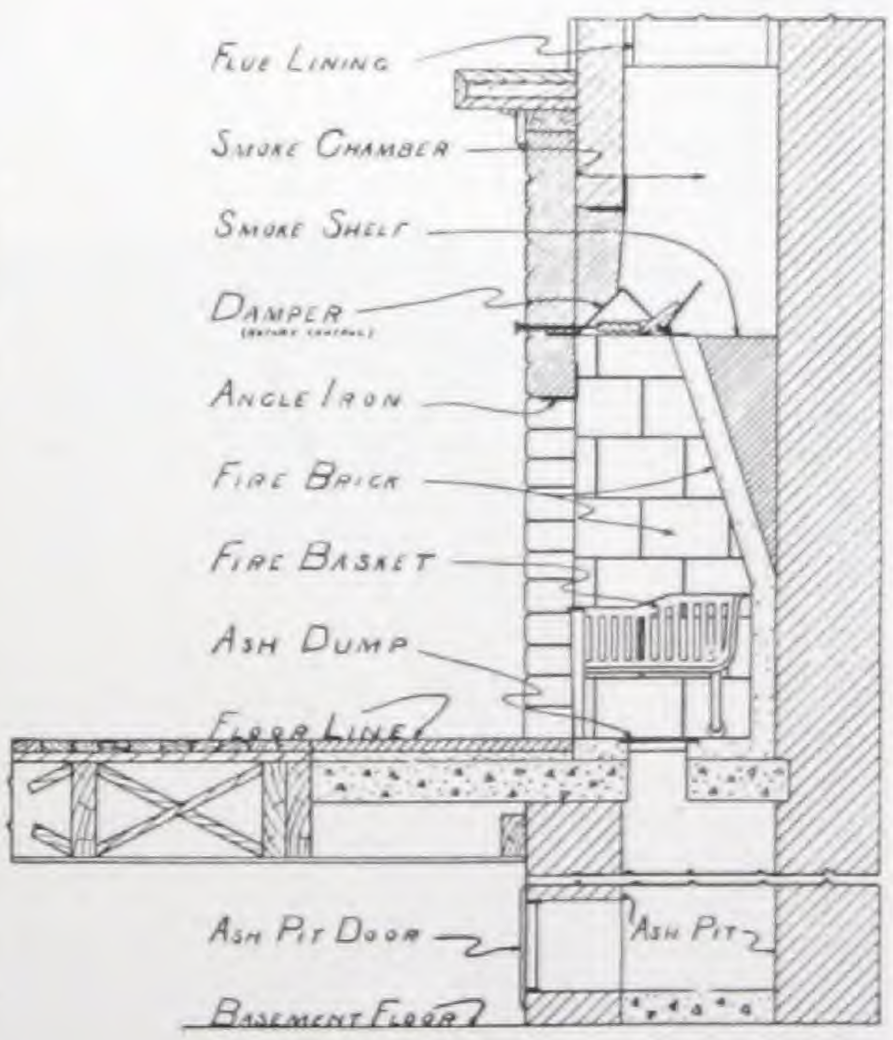


Fig. 3

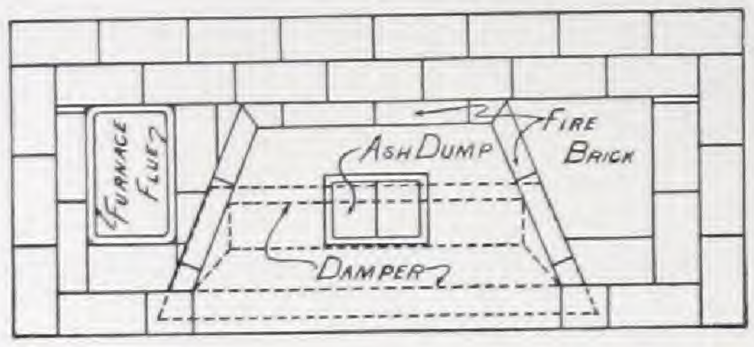


Fig. 4

for larger fireplaces. A shallow opening throws out more heat than a deep one. There are no advantages in specially high or deep fireplaces but there are many disadvantages. If you want a larger fireplace make it wider and, only in minor degree vary the height or depth. Above all use the table of dimensions to assure accuracy.

HOW TO SHAPE THE FIREPLACE FOR HEAT RADIATION

The shape of the fireplace determines the amount of heat a fireplace will radiate. By making wall depth too great or by making the ascent of the flame too nearly vertical, much heat is going up the chimney.

The shape of the side walls of the fireplace also is very important to the giving off of heat. Right-angle side walls or side walls that go straight back from the fireplace front and having a square rear corner create a corner area in which some heat is wasted, having a tendency to pass up the chimney and be lost.

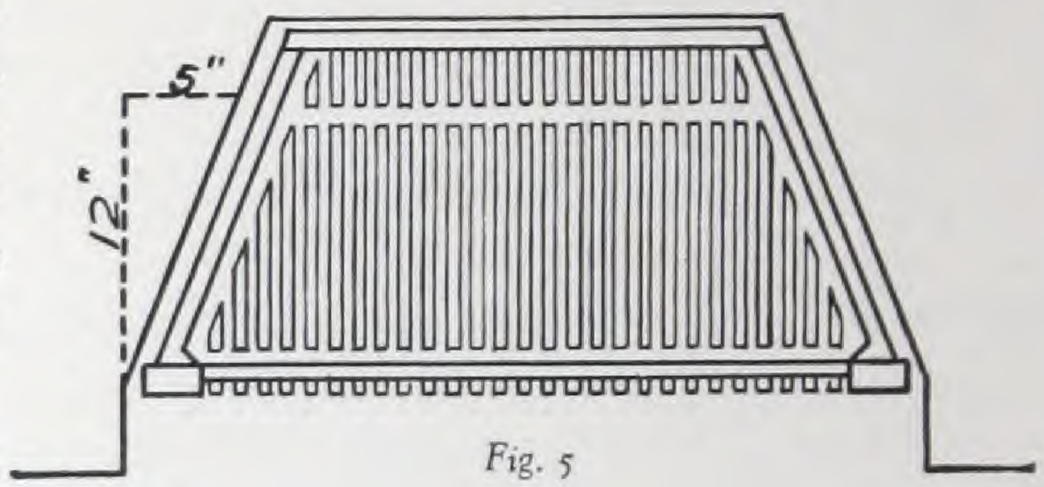


Fig. 5

The wall angle we recommend slants from front to rear at an angle of five inches to the foot, beginning one course of brick from the fireplace front, about four inches. Figure 5 bears on this particular angle of the fireplace side wall.

The angle of five inches to the foot is not arbitrarily chosen but has been selected with utmost care, after consultation with many successful fireplace builders and the examination of hundreds of plans. It represents a wide consensus of opinion. We do not aim to introduce a special form of fireplace in the interest of Donley Equipment but we do recognize the desirability of a standardized wall angle in the interest of better fireplaces and have taken our own first step in that direction.

Photograph No. 1. Photograph showing mason starting the fireplace. The rough brick work has been finished. The top of rough opening is arched although many builders use angle iron instead. Above and back of arch is funnel shaped smoke-chamber as shown by dotted lines in Figure 2, Page 13. Notice the mason splaying the side walls. Details of this angle shown in Figures 4 and 5. The Donley Ash Dump is in floor of fireplace at the back. The crated damper is leaning against wall.

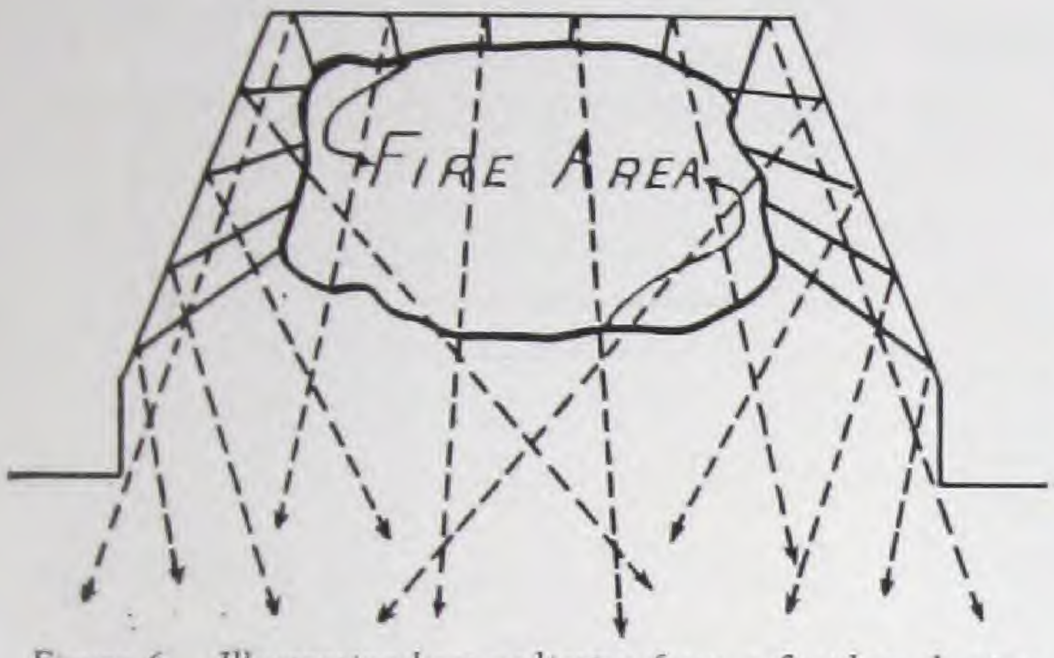


Figure 6. Illustrating heat radiation from a fireplace. having properly designed side and rear walls.

The same general result may be obtained by a slightly greater or less angle than five inches to the foot but there are reasons for standardizing the wall angle. The most important reason is that we get an excellent amount of heat radiation from this angle. It is also correct for the Donley Damper (see Fig. 4) and fits the Donley Fire Basket. It was necessary to standardize this angle to prevent possible misfit in using these devices.

From photograph No. 1, showing fireplace being built you can see how this angle looks when being constructed by the mason.

THROWING THE HEAT FORWARD

From Fig. 3 you will see the upper part of the back wall slanting forward meeting the rear flange of the damper a few inches above the elevation of the fireplace opening. This slope performs two functions. First, it deflects heat into the room because the rapidly ascending air current constantly tends to draw the heat up the chimney. Ascending heat waves striking the sloping back are thrown forward beneath the breast wall, while the smoke is drawn upward through the throat into the smoke chamber and out the flue.

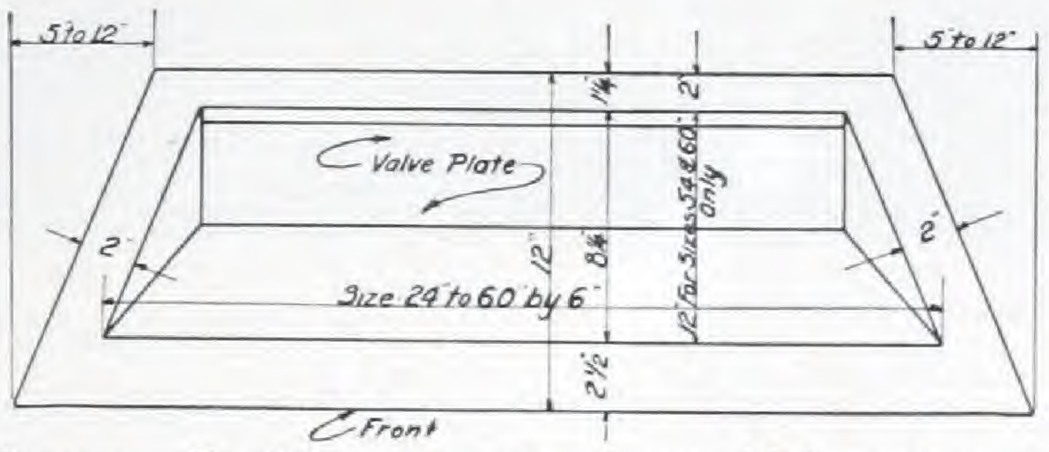


Figure 7. Detailed measurements of sizes of different parts of the Donley Damper.

The sloping wall also helps form the smoke shelf with which we deal later.

PLENTY OF HEAT—NO SMOKE

To draw off all the smoke and gases without losing undue heat requires a correct adjustment of the throat aperture. This can best be effected by means of a dependable damper under easy control.

Other things may cause smoking, besides the wrong size or throat aperture. For example:

1—Roughness of the fireplace throat.
2—Too narrow a throat, that is, a

Photograph No. 2. In this photograph the mason is shaping back wall forward to give better radiation of heat and to form smoke-shelf. The Poker Control Damper uncrated at left.

Photograph No. 3. The side and rear fireplace walls of narrow Roman brick completed ready for damper. Note interesting effect of soldier course of Roman brick. The back wall sloped forward is held by temporary support. This forward slope in cross-section, and use of fire brick for back and side-walls, a common practice, are shown in Fig. 3.

damper not as long as the width of the fireplace opening. 3—Rough masonry in the smoke-chamber or in the flue. 4—Too small a flue. 5—Too low a position of the damper and throat. 6—Arched openings are more liable to cause smoke than rectangular opening. 7—Height of chimney in relation to ridge of roof or other outside causes. 8—Improper construction of smoke chamber.

SIZE DAMPER TO USE

The Donley Damper is an effective safeguard against several of the chief causes of smoking. It is more than a damper. It offers a complete metal throat passage, insuring a smooth means of exit for the products of combustion, out of the fireplace and into the smoke chamber.

The Donley Damper also offers means of getting sufficient throat capacity, providing the right size damper is used. Select the size, in inches, corresponding to the width of your fireplace opening. See table of dimensions, Page 12. If your opening is an "in-between" size, use the next larger size of Donley Damper.

We recommend placing the Damper one to three courses of brick above the breast line of the opening. The higher position offers a greater security against

Photograph No. 4. The Damper has now been set in place. The rear flange of the damper rests on the sloping back wall that helps form the smoke-shelf. In this photo the Damper is set farther back than usual to allow for stone facing.

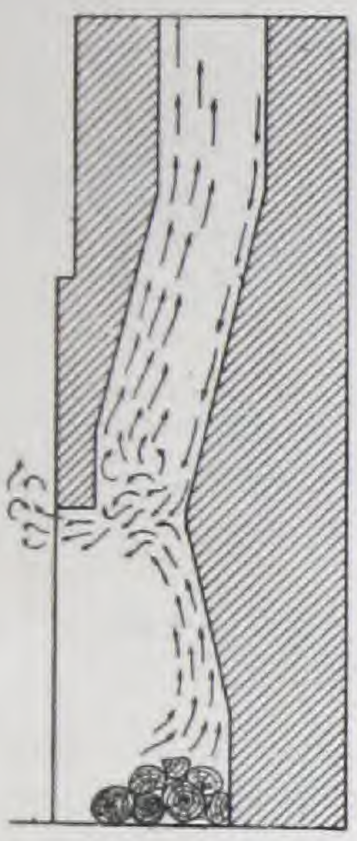


Figure 6. Showing how down-draft causes smoke eddies where smoke-shelf is omitted.

smoke eddies. The lower position tends to give more heat. The damper is placed at the *front* of the fireplace as shown in Figure 3, the back of the fireplace sloping forward to form smoke shelf. See photograph, No. 3. The forward flange of damper rests in the face brick in the fireplace; the side and rear flange rests on the fire brick. The front flange should bear the same relation to the finished face of the fireplace as that shown in Figure 3.

The damper operating rod for rotary control is furnished as in Figure 3. Upon request we can furnish longer rods to meet particular conditions.

SMOKE-CHAMBER

From the throat, the smoke passes into the smoke-chamber, which has a pyramid-like section as it narrows to size of flue. See Figure 2, Page 13. Its sides should have a slope of about 7 inches in 1 foot of height. Too abrupt an angle congests the smoke and causes eddies in the room. The interior masonry should be smooth and the outlet to the chimney accomplished without obstacle. The flue lining starts at the top of smoke-chamber.

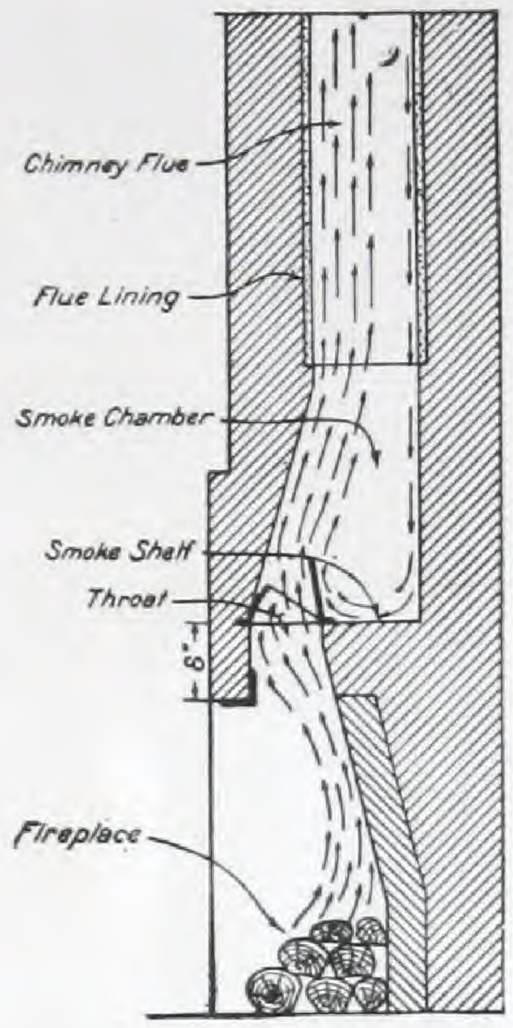


Figure 7. Showing how down-draft is diverted upward from smoke-shelf. This and diagram opposite taken from U.S. Government pamphlet.

Where the flue is offset in order to reach a chimney-stack a few feet distant, the offset should not be started in the smoke-chamber. Finish the chamber exactly as though the flue were to be straight and commence the flue slope where it connects with the chamber. Otherwise, the fireplace will draw unevenly on the two sides.

Between damper and rear wall of chamber is the horizontal flat surface called the smoke-shelf. Located directly under the flue, it arrests falling soot and acts as a baffle for the down-draft, breaking its force and deflecting it upward into the ascending current, instead of forcing ascending smoke out into the room. Note the diagram of smoke-shelf, Page 13, Figure 3.

The smoke-chamber must be large enough and properly shaped if the fireplace is to work well. Its cubic capacity

Photograph No. 5. The opening between damper and rough brick being closed up. The damper acting as a lintel supporting brick work that closes up smoke-chamber. Damper is about 6 inches above top of finished fireplace opening, see next photograph.

Photograph No. 6. The mason putting finishing touches on stone facing around opening. Notice design of Roman brick in hearth as well as side walls. The fireplace is now ready for front hearth and fireplace front.

reduces the violence of draft impulses from above and below, giving it a sort of shock absorbing function.

HOW TO DEAL WITH DOWN-DRAFT

Down-draft is present in all chimneys due to compensation for up-draft from fire, adjusting differences of temperature between outside and inside, to actual winds, or combination of these three causes.

Where there is a narrow, sloping passage, instead of a smoke-chamber with its smoke-shelf, the down-draft at times will drive part of the smoke back into the room.

Many complicated arrangements have been devised for checking down-draft, but they are not necessary, if the fireplace is built according to our instructions.

The force of the down-draft can be arrested and diverted up the chimney by means of the open valve-plate of the Donley Damper which, in conjunction with the smoke-shelf acts as a smoke-deflector. See Figure 3, Page 13. Quite frequently large trees near a chimney top deflect wind down the chimney, forcing smoke into the room. A chimney should rise not less than 30 inches above highest point of roof. Let the flue lining project 3 to 6 inches above the chimney.

Follow these directions carefully—take no chances—see that the fireplace builder follows the plan sheet that comes attached to every Donley Damper crate. Above all use the Donley Damper for proper draft action, a Donley Ash Dump to remove the ashes quickly and conveniently and a Donley Ash Pit Door for final removal of the ashes. Finish off the fireplace with the Donley Fire Basket and add the last beautifying touch with a pair of Donley Andirons.

Photograph No. 7. The finished fireplace with panelled wood mantel or fireplace front. Donley Fire Basket and Andirons.

I. C. Geist, Owner
E. O. Lauffer, Architect
Clyde A. Prouty, Builder

ROTARY CONTROL

To open or close this damper you rotate the knob that protrudes through mantel front. Diagram shows mechanism.

Donley Fireplace Damper

An indispensable aid to the proper burning of any fireplace, the Donley Damper provides a smooth, properly formed metal throat for the fireplace as well as a means of controlling the draft. It is made with two types of control, the Rotary, operated through the fireplace or mantel front, and the Poker, operated by means of a poker, as illustrated in this page. The Poker Control Damper has a simple and effective mechanism and is inconspicuous; the Rotary Control Damper is more convenient to operate. Please state desired style in ordering.

Donley Dampers simplify the mason's task in forming fireplace throat. The smooth, correct lines insure drawing off smoke and fumes without the eddies and belching of smoke and prevents the nuisance of soot smudges on the fireplace front.

Perfect draft control by means of the Donley Damper prevents waste of heat up the chimney and gives maximum warmth with economy of fuel. It is a favorite device of house builders, everywhere and when the fireplace is built according to Donley it is the home owner's best guarantee of fireplace satisfaction.

Poker Control	Rotary Control	Throat Size Front	Overall Length	Shipping Weight
224	324	24"	30"	34 lbs.
230	330	30"	36"	36 "
236	336	36"	42"	40 "
242	342	42"	48"	53 "
248	348	48"	54"	56 "
254	354	54"	59"	94 "
260	360	60"	65"	100 "

POKER CONTROL

Diagram shows how this damper is controlled by hooking an ordinary poker into ring and pushing or pulling until desired position is reached.

Donley Andirons

Andirons, as we know them today, have a unique history. No one knows exactly when they were first used but museum curators will show us andirons whose origin can be traced back a thousand years. An interesting fact is that the oldest andirons in existence have practically the same shape and structural lines as our modern andirons.

In the fifteenth century andirons were called fire dogs because the andiron top was shaped like a dog's head. Later they were called andirons from "hand irons" or "end irons." Some of these ancient fire dogs cast of iron in the sixteenth century weighed two hundred pounds.

It would require a book to describe all of the countless forms that the andiron has taken on its march through centuries. However, the eighteenth century found the andiron in grotesque shapes such as dog heads, twisted flames, women's heads, claw feet and steeples. Of special interest are the Marching Hessians of 1776, an outgrowth of the Revolution, and the Ball Topped Andiron of the same period.

Andirons have always been used primarily for supporting logs in the fireplace. At one time hooks were added upon which to hang pots, kettles and spits, and a tripod placed at the top to support cooking vessels. These andirons of past ages were made of bronze, iron or brass, sometimes being decorated with silver or enamel. In recent years andirons have been made mainly of iron and have been used primarily for decoration.

The Sentinel

Now that you have finished your fireplace, you will need a pair of beautiful andirons to set off the picture. Andirons are the furniture of the hearth. Without them your fireplace will seem as incomplete as a room without furniture. They are essential to modern fireplace decoration in that they give a finishing touch of beauty and coziness. Andirons will add to the comforts and pleasures of long winter evenings before your open fire.

In the Donley Andirons you will find beauty culled from the ancient smithy's work united with the grace, simplicity and pleasing charm of modern decoration. They have a quiet dignified design that harmonizes with the most beautiful modern fireplace. Special attention has also been given to their utility and sturdiness. The five Donley Andirons shown here are exclusive in beauty of design. They are made of highest quality cast iron. Each pair of Andirons comes packed in a separate box plainly marked with Style, Size and Weight.

The Regal

THE SENTINEL

The Sentinel is well named. Topping its tall tapering figure is the steeple top of andirons of yore combined with

a modern architectural simplicity and grace. The Sentinel is worthy of a place on the hearth of the American home. It stands 20½ inches high. It is finished in Statuary Bronze, Antique Brass and Black. Shipping weight 44 lbs.

The Windsor

THE REGAL

In the Regal can be seen the reflection of the eighteenth century style in its graceful, correct porportions and its ball top. The andiron is decorated on the shaft with tulip petals giving a modern and unique turn to its beauty. This is the tallest of the group of five, standing 22 inches high. It is a correct andiron for the medium and larger fireplace. Shipping weight 48 lbs. Finish —Statuary Bronze, Antique Brass and Black.

THE WINDSOR

In the urn standing on top of this andiron we have a beautiful Old English type. Coupled with the urn is the tapering decorated shaft that gives a twentieth century tone to this old design. The Windsor is 18½ inches tall and has a beauty and grace that makes it a favorite with all who see it. Finished in Statuary Bronze, Antique Brass and Black. Shipping weight 35 lbs.

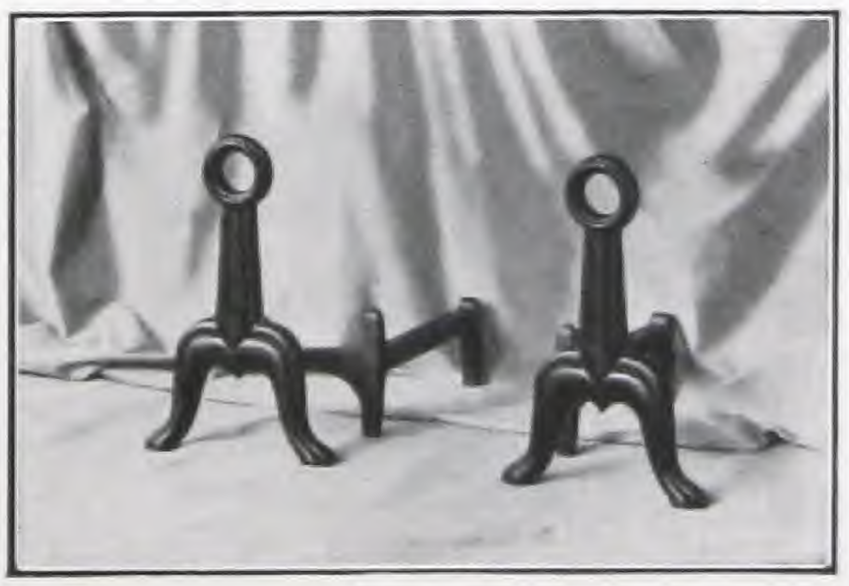
The Spartan

THE SPARTAN

The Spartan appeals to the conservative. While it bears on its shaft the twisted flame design of centuries gone by, still it also carries a certain conservativeness of lines that brings out a dignity of its own. The Spartan reaches a height of 20 inches and is of particular artistic value in the dignified fireplace. Shipping weight 44 lbs. In Statuary Bronze, Antique Brass and Black finish.

THE STANDISH

Standing but 14½ inches high, the Standish is a partial replica of earlier days. It is immediately marked for an andiron of early Colonial period. Its loop shaped top and its peculiarly charming designing on the front gives it a character of its own. The Standish gives grace and charm to the smaller fireplace. Comes finished in Statuary Bronze, Antique Brass and Black. Shipping weight 25 lbs.



The Standish

Donley Fire Basket

After you have built the fireplace according to the plans in this booklet and have installed the Donley Damper, you will want to set off the fireplace with a good looking Donley Fire Basket. Beauty and utility are combined in the Donley Fire Basket. Its lines are simple, graceful and correct, and its construction sturdy enough to withstand hard usage for many years. Having no eccentricity of design it harmonizes with any decorative scheme the architect may prefer and is a ready seller for every class of residence. Remove the ends, by lifting them out, and burn wood of any length that the fireplace will take. Construction safeguards against falling out of ends, through warping.

This basket narrows toward the rear at just the degree to fit a properly splayed hearth plan, thereby solving the difficulty that careful fireplace designers sometimes experience in finding a basket to fit their plan. Experience shows that sides splayed at this angle radiate heat into the room more effectually than square-cornered fireplaces.

Front	Depth	Back	Shipping Weight
24"	15"	12 ½"	63 lbs.
28"	15"	16 ½"	69 "
30"	15"	18 ½"	73 "
34"	15"	22 ½"	80 "
40"	15"	28 ½"	90 "

Donley Ash-Dumps

Donley Ash-Dumps are iron trap-doors closing the ash-pit and excluding dust and odor from living rooms. They are a part of every well equipped fireplace. Automatic Ash-Dump closes itself after ashes have been pushed through it. Common Ash-Dump is opened and closed by poker. Shutters cannot come loose or fall in ash-pit.

Donley Ash-Pit Doors

Donley Ash-pit Doors or Clean-out Doors are of original design, which promotes strength, neatness and close fit. Larger sizes are used for removing ashes and smaller sizes at bases of chimney flues for removing soot. The 8 x 10 size is frequently used for removing ashes but the 10 x 12 is more convenient.

Size	Shipping Weight	Size	Shipping Weight
7″x 9″	66 lbs. doz.	24″x18″	440 lbs. doz.
8″x 8″	66 " "	30″x24″	1320 " "
8″x10″	86 " "	*30″x24″	840 " "
10″x12″	126 " "	‡30″x30″	2020 " "
12″x15″	164 " "		

*Steel door. ‡Double door.

Donley Ratchet Damper

This damper has poker-controlled valve-plate, also sliding shutter for additional draft adjustment. A good, practical means of draft control, but without throat-forming feature.

No.	Length Over All Front	Length Over All Back	Shipping Weight
124	24″	22″	13 lbs.
126	26″	24″	14 "
128	28″	26″	15 ½ "
130	30″	28″	17 "
132	32″	30″	18 ½ "
136	36″	34″	20 "
142	42″	40″	21 ½ "
148	48″	46″	27 "

Donley Steel Angles

These angles are used at the top of the rough brick opening and also at the top of the finished fireplace opening. Builders find them to be more economical in the rough fireplace opening than the making of arches. Order these steel angles with the Damper. They may be had in sizes and lengths as follows:

3 x 3 x ¼″, also 4 x 3 x ¼″, in lengths 30″, 36″, 42″, 48″, 54″. For larger fireplaces 4 x 4 x ¼″ angles in lengths 60″, 66″ and 72″. Special lengths to order.

DONLEY DEVICES
Complete the Home

Printed by The William Feather Company, Cleveland, Ohio